

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK2004/000455

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12G1/02 C12H1/00 C12N1/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12G C12H C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, FSTA, BIOSIS, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 607 854 A (PRAHL CLAUS ET AL) 4 March 1997 (1997-03-04) cited in the application column 4, line 15 - line 60; examples 1,2	1-62
A	US 5 077 060 A (PRAHL CLAUS) 31 December 1991 (1991-12-31) column 3, line 12 - column 4, line 35; claims; example 7	1-62
A	US 5 460 837 A (D AMICO NICOLA ET AL) 24 October 1995 (1995-10-24) column 2, line 18 - line 40; claims 1-10; examples 1,2	1-62
A	EP 0 327 380 A (UNISEARCH LTD) 9 August 1989 (1989-08-09) example 2; table 2	1-62
	-/--	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"8" document member of the same patent family

Date of the actual completion of the international search

27 April 2005

Date of mailing of the international search report

31.05.2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Baminger, U

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK2004/000455

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>NIELSEN JAN CLAIR ET AL: "Malolactic fermentation in wine by direct inoculation with freeze-dried Leuconostoc oenos cultures" AMERICAN JOURNAL OF ENOLOGY AND VITICULTURE, vol. 47, no. 1, 1996, pages 42-48, XP009023863 ISSN: 0002-9254 the whole document</p>	1-62
A	<p>----- NIELSEN J C ET AL: "Control of flavor development in wine during and after malolactic fermentation by Oenococcus oeni." APPLIED AND ENVIRONMENTAL MICROBIOLOGY 65 (2) 740-745 1999 RESEARCH & DEV., CHR. HANSEN A/S, DK-2970 HORSHOLM, DENMARK. TEL. 45 45747474. FAX 45 45748994. E-MAIL JCN.DK(A)CHR-HANSEN.COM, February 1999 (1999-02), XP002266818 page 741, column 1, last paragraph page 743, column 2, last paragraph - page 744, column 1, paragraph 1 page 740, column 1 - column 2</p>	1-62
A	<p>----- VILJAKAINEN S K ET AL: "The use of malolactic Oenococcus oeni (ATCC 39401) for deacidification of media containing glucose, malic acid and citric acid" EUROPEAN FOOD RESEARCH AND TECHNOLOGY, SPRINGER VERLAG, HEIDELBERG, DE, vol. 211, no. 6, 2000, pages 438-442, XP002266819 ISSN: 1438-2377 the whole document</p>	1-62
A	<p>----- CARRIE C ET AL: "COMPARISON OF COMMERICAL PREPARATIONS OF LACTIC ACID BACTERIA FOR DIRECT INOCULATION, FOR CONTROL OF MALOLACTIC FERMENTATION OF MERLOT WINES COMPARISON DE PREPARATIONS COMMERCIALES DE BACTERIES LACTIQUES A ENSEMENCEMENT DIRECT, EN VUE DE GERER LA FERMENTATION MALOLACTIQUE DU MERLOT" REVUE DES OENOLOGUES ET DES TECHNIQUES VITIVINICOLES ET OENOLOGIQUES, UNION NATIONALE DES OENOLOGUES FRANCE BOURGOGNE-PUBLICATIONS,, FR, no. 103, 2002, pages 16-18, XP009023946 ISSN: 0760-9868 page 17, column 2, last paragraph - page 18, column 2, paragraph 2; table 3</p> <p>----- -/--</p>	1-62

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK2004/000455

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	REGUANT C ET AL: "Influence of phenolic compounds on the physiology of Oenococcus oeni from wine." JOURNAL OF APPLIED MICROBIOLOGY 88 (6) 1065-1071 2000 CORRESPONDENCE (REPRINT) ADDRESS, A. BORDONS, DEP. DE BIOQUIMICA I BIOTEC., UNIV. ROVIRA I VIRGILI, E-43005 TARRAGONA, CATALONIA, SPAIN. E-MAIL ABPD(A)ASTOR.URV.ES, 2000, XP001157128 page 1070, column 1, paragraph 2 - paragraph 3; table 1	1-62
X	----- US 4 562 077 A (KING ET AL) 31 December 1985 (1985-12-31)	63-75
Y	column 3, line 33 - column 4, line 45; claim 1	76-104
Y	----- US 6 284 518 B1 (HENICK-KLING THOMAS ET AL) 4 September 2001 (2001-09-04) claims	76-104
Y	----- KRIEGER S A: "THE USE OF ACTIVE DRY MALOLACTIC STARTER CULTURES" AUSTRALIAN AND NEW ZEALAND WINE INDUSTRY JOURNAL, AUSTRALIAN INDUSTRIAL PUBLISHERS, ADELAIDE, AU, vol. 8, no. 1, February 1993 (1993-02), pages 56-62, XP009023867 ISSN: 0819-2421 page 57, column 2; figure 2	76-104
Y	----- JOYEUX A ET AL: "COMPARAISON DE DIVERSES PREPARATIONS INDUSTRIELLES DE BACTERIES LACTIQUES REACTIVEES POUR STIMULER LA FERMENTATION MALOLACTIQUE COMPARISON OF VARIOUS REACTIVATED INDUSTRIAL PREPARATIONS OF LACTIC ACID BACTERIA FOR STIMULATION OF MALOLACTIC FERMENTATION" CONNAISSANCE DE LA VIGNE ET DU VIN, VIGNE ET VIN PUBLICATIONS INTERNATIONALES, BORDEAUX, FR, vol. 19, no. 3, 1985, pages 149-159, XP009023986 ISSN: 0010-597X page 152, paragraph 2	76-104
T	----- BELITZ, H.-D. AND GROSCH, W.: "Lehrbuch der Lebensmittelchemie" 1992, SPRINGER, XP002326417 page 767; table 18.35 ----- -/--	

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

International Application No

PCT/DK2004/000455

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>PILATTE E ET AL: "Development of a specific activator for malolactic bacteria."</p> <p>REVUE DES OENOLOGUES ET DES TECHNIQUES VITIVINICOLES ET OENOLOGIQUES, 1999, XP009046219</p> <p>CHR. HANSEN FRANCE, 91 ARPAJON, F</p> <p>page 31, column 3 - page 32</p> <p>-----</p>	76-104

BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DK2004/000455

BEST AVAILABLE COPY

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5607854	A	04-03-1997	US 2003203069 A1 30-10-2003
		AU 676472 B2 13-03-1997	
		AU 4038593 A 08-11-1993	
		DE 69301238 D1 15-02-1996	
		DE 69301238 T3 09-08-2001	
		DE 635050 T1 13-07-1995	
		EP 0635050 A1 25-01-1995	
		AT 132525 T 15-01-1996	
		WO 9320180 A1 14-10-1993	
		ES 2065869 T1 01-03-1995	
		NZ 251966 A 26-07-1995	
US 5077060	A	31-12-1991	AT 103324 T 15-04-1994
		AU 3054489 A 11-08-1989	
		AU 620379 B2 20-02-1992	
		DE 68914144 D1 28-04-1994	
		DK 30289 A 26-07-1989	
		WO 8906685 A1 27-07-1989	
		EP 0398957 A1 28-11-1990	
US 5460837	A	24-10-1995	CH 682155 A5 30-07-1993
		AU 1300992 A 22-10-1992	
		EP 0523316 A1 20-01-1993	
		HU 63874 A2 28-10-1993	
		NZ 242161 A 26-08-1993	
		ZA 9201923 A 25-11-1992	
EP 0327380	A	09-08-1989	AT 109823 T 15-08-1994
		AU 2954889 A 10-08-1989	
		DE 68917329 D1 15-09-1994	
		EP 0327380 A2 09-08-1989	
		US 5104665 A 14-04-1992	
US 4562077	A	31-12-1985	AT 28214 T 15-07-1987
		AU 561032 B2 30-04-1987	
		AU 2180783 A 26-04-1985	
		DE 3372379 D1 13-08-1987	
		EP 0141878 A1 22-05-1985	
		ES 8601298 A1 16-02-1986	
		NZ 206375 A 29-11-1988	
		US 4904486 A 27-02-1990	
		US 4708877 A 24-11-1987	
		ZA 8406122 A 27-03-1985	
US 6284518	B1	04-09-2001	NONE